

# Math Department Assessment Criteria

In response to a piece of work at an appropriate level

		<b>Achievement level 1/2 Minimal level</b>	<b>Achievement level 3 Approaching the level</b>	<b>Achievement level 4 Satisfactory level</b>	<b>Achievement level 5 Good level</b>	<b>Achievement level 6 Very good level</b>	<b>Achievement level 7 Outstanding level</b>
<b>Criterion A: Level of Knowledge, Skills and Understanding</b>	<b>Demonstrating Understanding</b> 1. How effectively did I demonstrate my understanding overall?  2. How well did I use mathematical tools?	1. My work shows some facts.  2. I rarely used the basic tools.	1. My work shows knowledge of relevant facts, but contains misunderstandings of some key concepts.  2. I sometimes used basic tools well	1. My work shows an understanding of some key concepts. I connected some necessary facts and ideas.  2. I usually used standard tools accurately and effectively.	1. My work demonstrates good understanding of many key concepts important to the task. I connected the necessary facts and ideas.  2. I used tools accurately.	1. My work demonstrates broad understanding of most key concepts important to the task. I frequently connected important facts and ideas.  2. I used tools in a more advanced context	1. My work clearly demonstrates a thorough and deep understanding of the key concepts and ideas important to the task. Facts and ideas were connected intelligently.  2. I recognized and took opportunities to use tools in a complex manner.
<b>Criterion B: Language for Learning</b>	<b>Communication of Task</b> 1. How well did I piece together and structure the information?  2. How well did I use terms and <b>notation</b> ?	1. I made no attempt to communicate my solution. I provided no structure.  2. Use of terms and notation was minimal.	1. I attempted to communicate my work, but did not always do so clearly and did not give much structure to the work. I did not explore or justify ideas.  2. I used terms and notation inconsistently.	1. I communicated my work, including some evidence and with some structure. I did not generalize or justify solutions, and did not address scope or limitations in my work.  2. I mostly used recognized terms and notation.	1. I communicated my work clearly with good evidence, using graphs, examples, tables. I showed a basic understanding of proof and of the idea of scope and limitations.  2. I used terms and notation correctly.	1. I communicated my work clearly, with most ideas illustrated with convincing evidence and clear explanations. I showed a good sense of proof, and referred to the idea of scope and limitations well.  2. I used sophisticated terms and notation correctly.	1. I communicated my work convincingly, presenting all ideas explicitly and precisely. I proved necessary mathematics, sometimes in a rigorous manner. I explored scope and limitations in an extended way.  2. I used terms and notation perfectly, including in complex situations.
<b>Criterion C: Conceptual Learning</b>	<b>Formulating/ understanding the questions/ problem?</b> 1. How well did I choose appropriate skills and strategies to solve the problem?  2. How well did I apply my knowledge to unfamiliar situations and show evidence of reflection to reach the final solution?	1. My work did not show any progression of steps, and did not choose strategies appropriately.  2. I demonstrated little knowledge and therefore was not able to reflect upon my work.	1. My work was missing many steps, and computations did not all progress naturally. I found answers with difficulty, the techniques I used were not appropriate or were inefficient.  2. I rarely applied my knowledge in unfamiliar situations, and demonstrated little evidence of reflection in my work.	1. My work showed a solution but lacked some structure and the progression was not clear. I chose some correct strategies but did not always use the necessary skills well.  2. I applied my knowledge in some simple unfamiliar situations. I showed some evidence of reflection.	1. My work had structure and the progression could be followed. I mostly used the correct strategies to find the solutions, but at times included unnecessary steps.  2. I applied my knowledge in many unfamiliar situations. The majority of my work showed some evidence of reflection.	1. My work was clearly structured and progressed well. I used efficient and relevant strategies.  2. I applied my knowledge in most unfamiliar situations, noting applications when relevant. The majority of my work demonstrated reflection.	1. My work arrived at the solution with clear structure from start to finish. At each step in the problem I used the most efficient and relevant strategy, leading to an elegant solution.  2. I applied my knowledge in all possible unfamiliar situations, noting applications explicitly. I reflected on my work at length, with evidence of problem solving strategies. I considered error analysis.